

**Table 10-1**  
**Chemical-Specific<sup>a</sup> ARARs by Medium**  
**Investigation Area H1**  
**Mare Island, Vallejo, California**

Location/Requirement	Citation <sup>b</sup>	ARAR Determination	Comments
<b>FEDERAL</b>			
<b>GROUNDWATER</b>			
<b>Resource Conservation and Recovery Act (42 U.S.C., ch. 82, §§ 6901–6991[i])<sup>c</sup></b>			
Defines RCRA hazardous waste. A solid waste is characterized as toxic, based on the TCLP, if the waste exceeds the TCLP maximum concentrations.	Cal. Code Regs. tit. 22, § 66261.21, 66261.22(a)(1), 66261.23, 66261.24(a)(1), and 66261.100	Applicable	Applicable to the RCRA Interim Status Landfill and IWTP Surface Impoundments of IA H1 within the Containment Area.  Applicable for wastes generated during the remediation and treated groundwater removed for off-site disposal.
Groundwater protection standards: Owners/operators of RCRA treatment, storage, or disposal facilities must comply with conditions in this section that are designed to ensure that hazardous constituents entering the groundwater from a regulated unit do not exceed the concentration limits for contaminants of concern set forth under Cal. Code Regs. tit. 22, § 66264.94 in the uppermost aquifer underlying the waste management area of concern at the POC.	Cal. Code Regs. tit. 22, § 66264.94, except 66264.94(a)(2) and 66264.94(b)	Applicable	Applies to the interim status RCRA-regulated units.
The POC is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends through the uppermost aquifer underlying the regulated unit.	Cal. Code Regs. tit. 22, § 66265.95	Applicable	ARAR for the interim status RCRA-regulated units. Because of the installation of the slurry wall and practical purposes, the POC is defined as downgradient of the Containment Barrier.
<b>Clean Water Act of 1977, as Amended (33 U.S.C., ch. 26, §§ 1251–1387)<sup>c</sup></b>			
National Ambient Water Quality Criteria.	33 U.S.C. § 1314(a) and 42 U.S.C. § 9621(d)(2)  64 Fed. Reg. 19,781 (22 April 1999)	Applicable	There may be limited hydraulic communication between the surface water and groundwater of San Pablo Bay, and the non-tidal wetland surface water and groundwater within IA H1. Installation of the slurry wall is complete; the wall acts to limit or eliminate the potential for contaminated groundwater to reach surface waters outside the Containment Area.

**Table 10-1 (continued)**  
**Chemical-Specific<sup>a</sup> ARARs by Medium**  
**Investigation Area H1**  
**Mare Island, Vallejo, California**

Location/Requirement	Citation <sup>b</sup>	ARAR Determination	Comments
<b>FEDERAL</b>			
Water quality standards.	40 C.F.R. § 131.36(b) and 131.38	Applicable	There may be limited hydraulic communication between the surface water and groundwater of San Pablo Bay, and the non-tidal wetland surface water and groundwater within IA H1. Installation of the slurry wall is complete; the wall acts to limit or eliminate the potential for contaminated groundwater to reach surface waters outside the Containment Area.
Water quality standards.	40 C.F.R. § 131.37	Applicable	IA H1 is in the San Francisco Bay/San Joaquin Delta estuary area.
<b>SURFACE WATER</b>			
<b>Resource Conservation and Recovery Act (42 U.S.C., ch. 82, §§ 6901–6991[i])<sup>c</sup></b>			
Groundwater protection standards: Owners/operators of RCRA treatment, storage, or disposal facilities must comply with conditions in this section that are designed to ensure that hazardous constituents entering the groundwater from a regulated unit do not exceed the concentration limits for contaminants of concern set forth under Cal. Code Regs. tit. 22, § 66264.94 in the uppermost aquifer underlying the waste management area of concern at the POC.	Cal. Code Regs. tit. 22, § 66264.94, except 66264.94(a)(2) and 66264.94(b)	Applicable	Applicable for the interim status RCRA-regulated units.
<b>Clean Water Act, as Amended (33 U.S.C., ch. 26, §§ 1251–1387)<sup>c</sup></b>			
National ambient water quality standards.	40 C.F.R. § 131.36(b)	Applicable	There is surface water runoff to the non-tidal wetlands within IA H1. Surface water contamination may be attributed to run-off and/or soil/sediment contamination.
Water quality standards.	40 C.F.R. § 131.37	Applicable	IA H1 is in the San Francisco Bay/San Joaquin Delta estuary area.
Water quality criteria.	33 U.S.C., ch. 26, § 1314(a) and 42 U.S.C., ch. 103, § 9621(d)(2)  64 Fed. Reg. 19,781 (22 April 1999)	Applicable	There is surface water runoff to the non-tidal wetlands within IA H1.

**Table 10-1 (continued)**  
**Chemical-Specific<sup>a</sup> ARARs by Medium**  
**Investigation Area H1**  
**Mare Island, Vallejo, California**

Location/Requirement	Citation <sup>b</sup>	ARAR Determination	Comments
<b>FEDERAL</b>			
<b>SOIL</b>			
<b>Resource Conservation and Recovery Act (42 U.S.C., ch. 82, §§ 6901–6991[i])<sup>c</sup></b>			
Defines RCRA hazardous waste. A solid waste is characterized as toxic, based on the TCLP, if the waste exceeds the TCLP maximum concentrations.	Cal. Code Regs. tit. 22, § 66261.21, 66261.22(a)(1), 66261.23, 66261.24(a)(1), and 66261.100	Applicable	Applicable for removal of any generated wastes taken off site for determination of whether waste is hazardous.
Groundwater Protection Standards: requirements to ensure that hazardous constituents entering the groundwater from a regulated unit do not exceed the concentration limits for contaminants of concern in the uppermost aquifer underlying the waste management area of concern at the POC.	Cal. Code Regs. tit. 22, § 66264.94(a)(1) and (3), (c), (d), and (e)	Applicable	Applicable to the RCRA-regulated units within IA H1.
LDRs prohibit disposal of hazardous waste unless treatment standards are met.	Cal. Code Regs. tit. 22, § 66268.4068.1(f) 66268.48	Applicable	Applicable only for off-site disposal of generated waste disposed of to landfills.
<b>Military Munitions Rule (40 C.F.R. pt. 266 subpt. M)<sup>c</sup></b>			
Identification of hazardous waste munitions and treatment and storage requirements for hazardous waste munitions.	40 C.F.R. pt. 266, subpt. M	Relevant or Appropriate	Only munitions debris has been found at the site; however, the potential for uncovering munitions exists during excavation activities and consolidation.
<b>SEDIMENT</b>			
<b>Clean Water Act, as Amended (33 U.S.C., ch. 26, §§ 1251–1387)<sup>c</sup></b>			
National ambient water quality standards.	40 C.F.R. § 131.36(b) and 131.38	Applicable	Contamination in the non-tidal wetland sediments has not been shown to correlate with water quality; however, the potential exists as some water and sediment contaminants cover the same area. Other possible sources include runoff from upland areas and storm water.

**Table 10-1 (continued)**  
**Chemical-Specific<sup>a</sup> ARARs by Medium**  
**Investigation Area HI**  
**Mare Island, Vallejo, California**

Location/Requirement	Citation <sup>b</sup>	ARAR Determination	Comments
<b>STATE</b>			
<b>GROUNDWATER, SURFACE WATER, SOIL, SEDIMENTS, AND AIR</b>			
<b>Cal/EPA Department of Toxic Substances Control<sup>c</sup></b>			
Definition of “non-RCRA hazardous waste.” Waste.	Cal. Code Regs. tit. 22, § 66261.22(a)(3) and (4), § 66261.24(a)(2)–(a)(8), § 66261.101, § 66261.3(a)(2)(C) or § 66261.3(a)(2)(F)	Applicable	Applicable only for wastes generated. Required for proper off-site disposal options.

**Notes:**

- <sup>a</sup> Many potential action-specific ARARs contain chemical-specific limitations and are addressed in the action-specific ARAR tables
- <sup>b</sup> Only the substantive provisions of the requirements cited in this table are potential ARARs
- <sup>c</sup> Statutes and policies, and their citations, are provided as headings to identify general categories of potential ARARs for the convenience of the reader; listing the statutes and policies does not indicate that the DON accepts the entire statutes or policies as potential ARARs; specific potential ARARs are addressed in the table below each general heading; only pertinent substantive requirements of the specific citations are considered potential ARARs

**Acronyms/Abbreviations:**

ARAR – applicable or relevant and appropriate requirement  
Cal. Code Regs. – *California Code of Regulations*  
C.F.R. – *Code of Federal Regulations*  
ch. – chapter  
DON – Department of the Navy  
Fed. Reg. – *Federal Register*  
IA – Investigation Area  
IWTP – Industrial Wastewater Treatment Plant  
LDR – land disposal restriction  
POC – point of compliance  
RCRA – Resource Conservation and Recovery Act  
RWQCB – (California) Regional Water Quality Control Board San Francisco Bay  
§ – section  
§§ – subsection  
subpt. – subpart  
TCLP – Toxicity Characteristic Leaching Procedure  
tit. – title  
U.S.C. – *United States Code*